



STATE OF MARYLAND

DMMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street, Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – John M. Colmers, Secretary

Office of Preparedness & Response

Sherry Adams, R.N., C.P.M., Director

Isaac P. Ajit, M.D., M.P.H., Deputy Director

September 17, 2010

Public Health & Emergency Preparedness Bulletin: # 2010:36 Reporting for the week ending 09/11/10 (MMWR Week #36)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

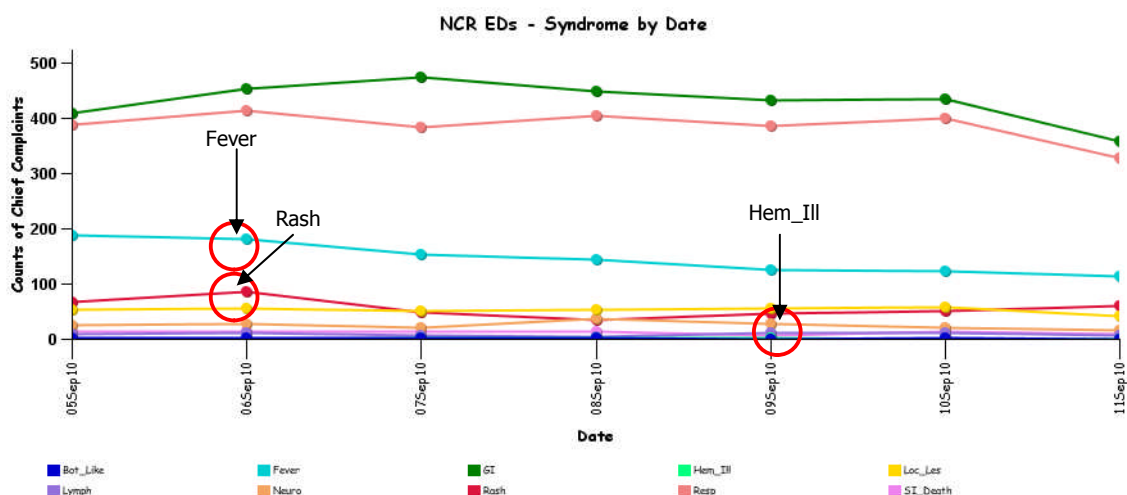
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

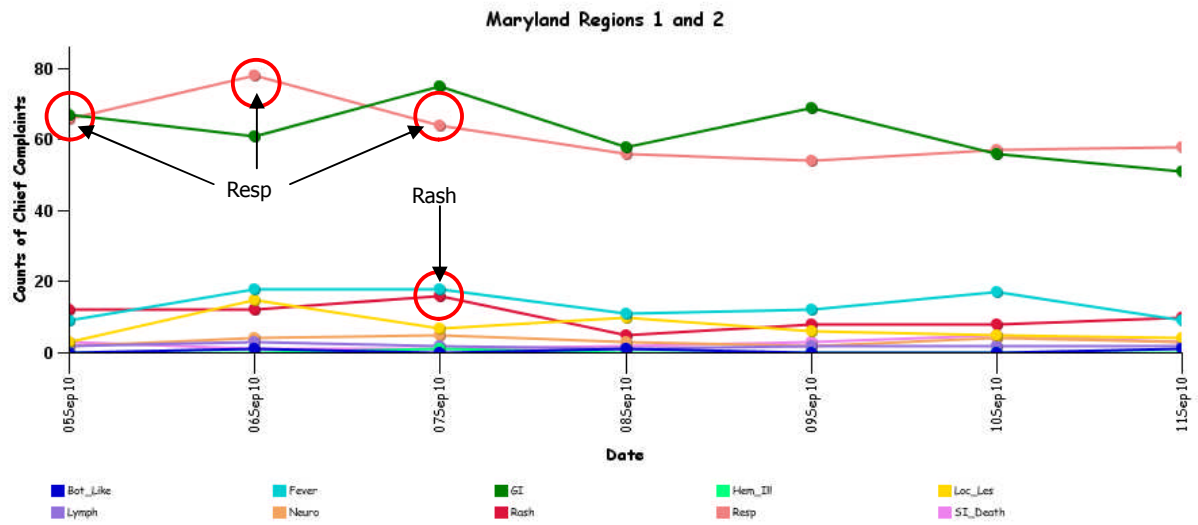
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

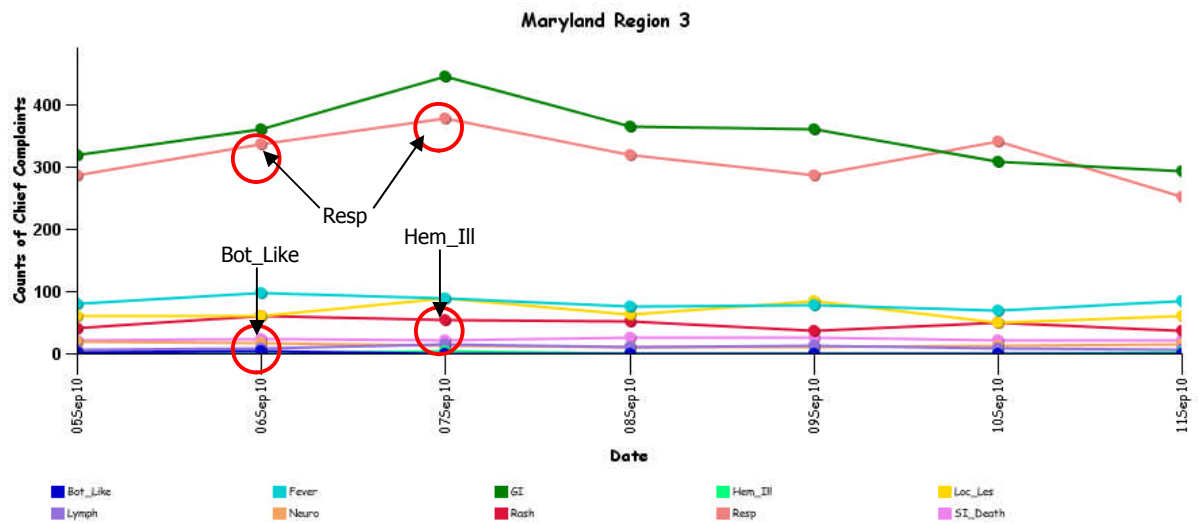
MARYLAND ESSENCE:



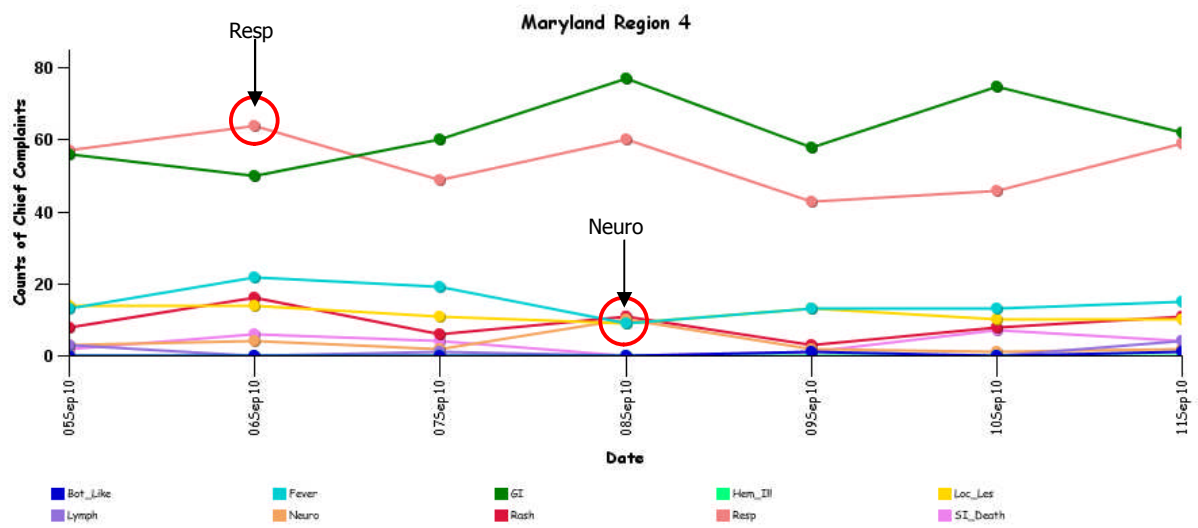
*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE



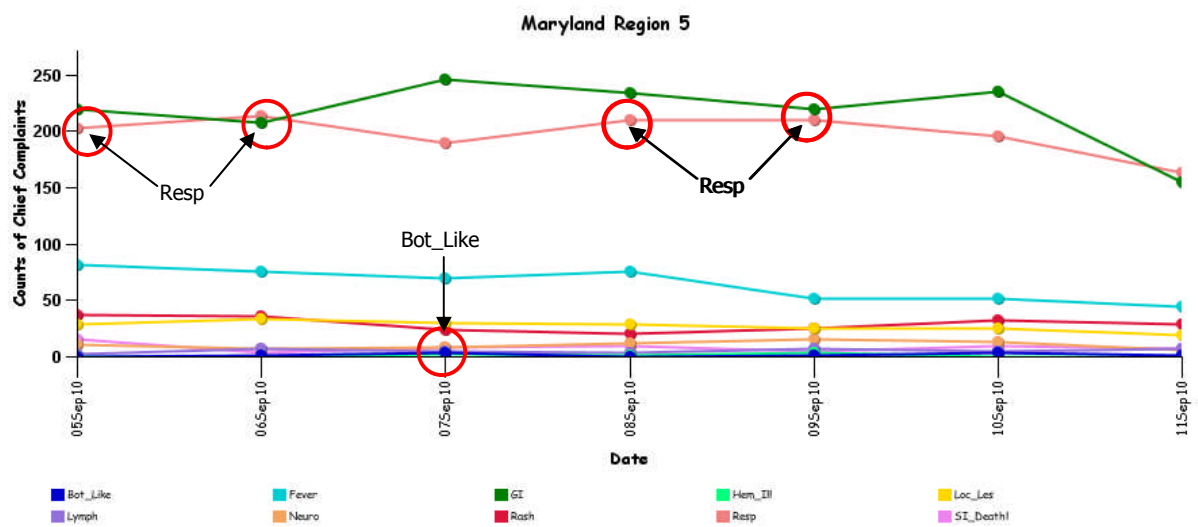
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore city, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

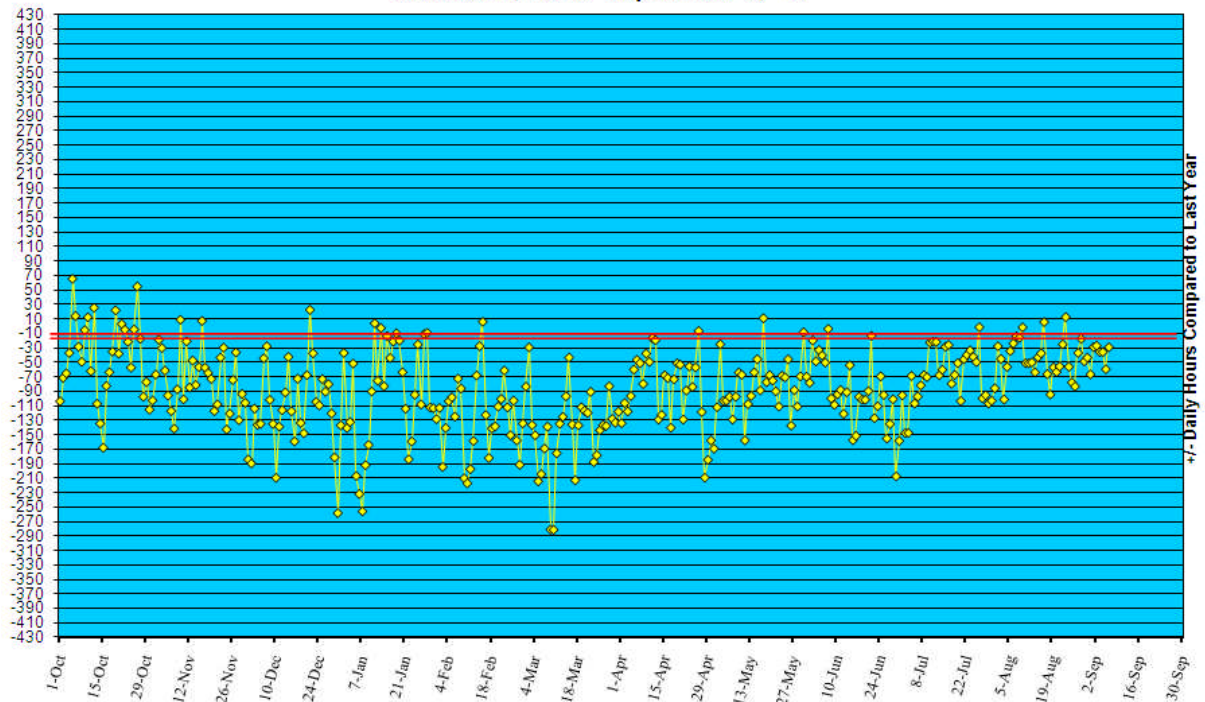


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/09.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '09 to September 6, '10



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in August 2010 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (September 5 – September 11, 2010):	21	0
Prior cases (August 29 – September 4, 2010):	16	0
Week#36, 2009 (September 6 – September 12, 2009):	21	0

1 outbreak was reported to DHMH during MMWR Week 36 (Sept. 5-11, 2010)

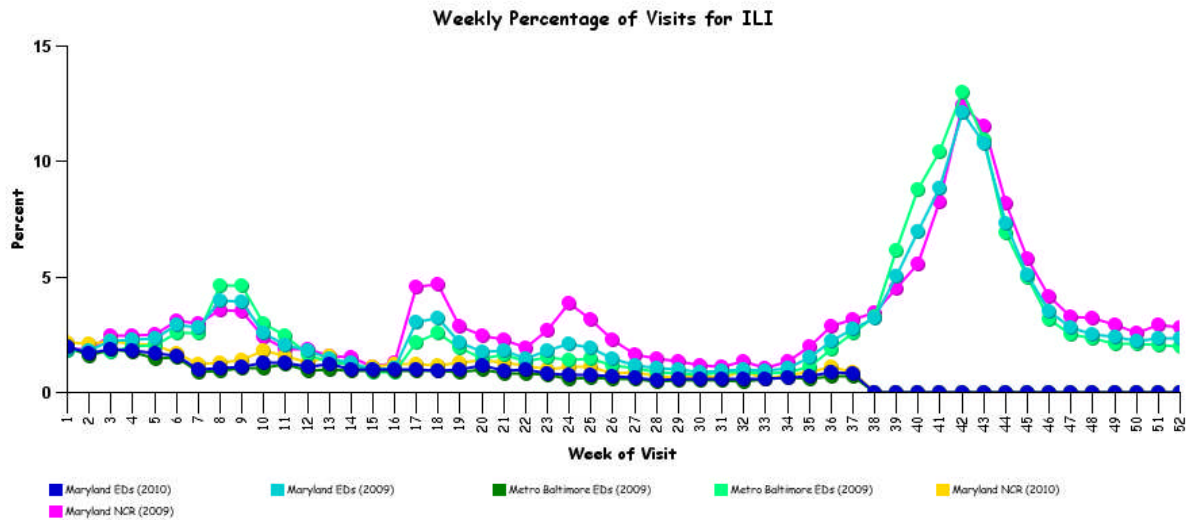
1 Rash illness outbreak

1 outbreak of SCABIES in a Nursing Home

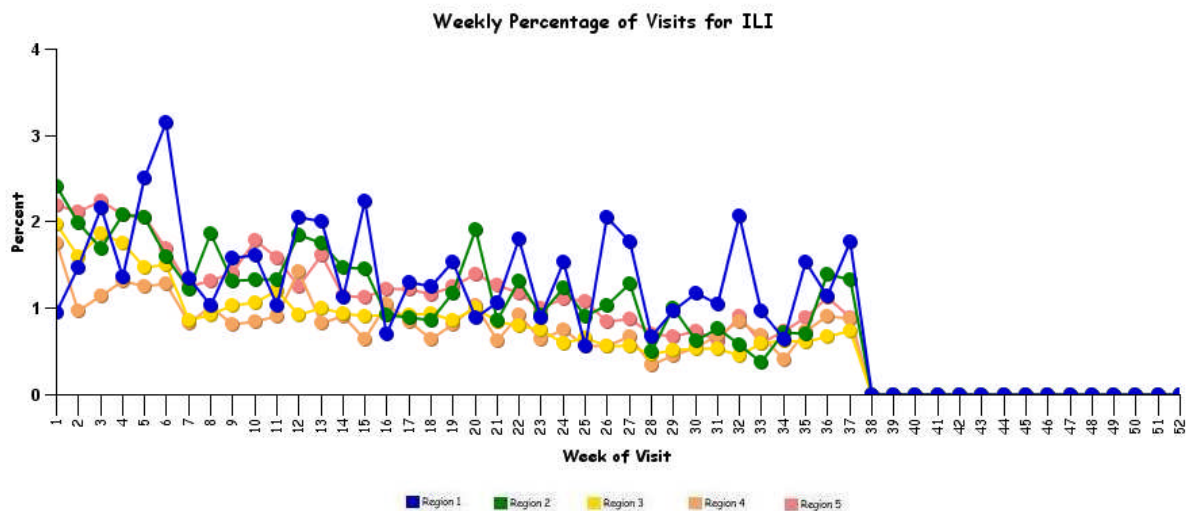
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



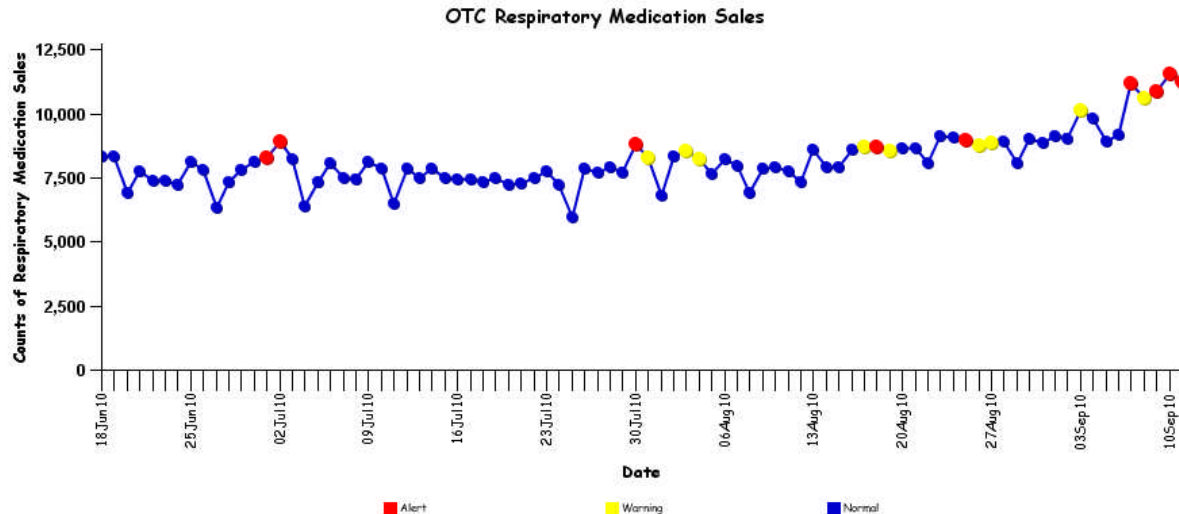
* Includes 2009 and 2010 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2010 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



AVIAN INFLUENZA-RELATED REPORTS:

WHO update: The current WHO phase of pandemic alert for avian influenza is 3.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 31, 2010, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 505, of which 300 have been fatal. Thus, the case fatality rate for human H5N1 is about 59%.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA PANDEMIC (H1N1) WHO UPDATE: As of 10 Sep 2010, influenza activity is currently most intense in the temperate areas of the southern hemisphere and southern Asia.

India is still experiencing a country-wide outbreak of H1N1 (2009) with active transmission and a substantial number of fatal cases in several states across the country.

Chile reported on a sharp increase in respiratory disease activity in the last 2 weeks. All age groups are affected, but the age groups below 65 years appear to be more affected than the older population. The level of activity in Chile in September 2010 is very unusual for this time of the year, as the country usually experiences a peak of respiratory disease in June and July. H1N1 (2009) virus has been the most commonly detected influenza virus so far this season, but in the recent weeks, there has been a shift towards influenza virus type B and influenza A (H3N2), with a decreasing proportion of H1N1 (2009) viruses. Respiratory syncytial virus transmission has also been widespread and intense, primarily affecting young children.

Australia has reported increasing influenza activity throughout August and September 2010, though recently the numbers of patients seen in emergency departments for influenza-like illness seem to have leveled off in parts of the country. Overall, influenza activity is well below the activity observed in the winter of 2009. The most commonly identified influenza virus in Australia is H1N1 (2009), though influenza type B is also being detected.

In New Zealand, influenza activity has decreased in the last week of August 2010, although activity is still well above baseline levels and with significant regional differences. The majority of influenza detections have been characterized as H1N1 (2009). Levels of influenza transmission in 2010 are below 2009 levels nationally but have exceeded 2009 in some localized areas of the country.

In Africa, the Central African Republic reported on their 1st ever detection of H1N1 (2009). South Africa observed a decrease in detection rate of influenza viruses in outpatients seen for respiratory disease for the 2nd week in a row. Influenza type B has been the most commonly detected influenza virus throughout this winter season [2010] in South Africa, though in recent weeks, the proportion of H1N1 (2009) viruses has increased, and a small, decreasing number of influenza A (H3N2) continues to be detected.

Resources:

<http://www.cdc.gov/h1n1flu/>

<http://www.dhmh.maryland.gov/swineflu/>

NATIONAL DISEASE REPORTS:

EASTERN EQUINE ENCEPHALITIS (MICHIGAN): 07 September 2010, Local health officials are encouraging people to avoid exposure to mosquitoes; there are reports that 2 men in Kalamazoo County and 1 woman in Barry County have tested positive for eastern equine encephalitis [EEE]. The mosquitoborne virus has killed 1 horse in Allegan County and 18 horses in Barry, Calhoun, Cass, and Kalamazoo counties as of 23 Aug 2010, according to the Michigan departments of Community Health and Agriculture. Allegan County Health Department director of environmental health, Bill Hinz, said that 4 other horses have died under suspicion of the disease. Tests are pending on 2 of them, and the other 2 tested negative. "There have been no reports for humans (in Allegan County) getting the virus," Hinz said. The disease is spread by viruses found in wild birds. Mosquitoes that feed on infected birds can transmit the disease to humans, horses, and other birds. Some birds are able to harbor the disease without becoming acutely ill, serving as reservoirs for the disease. According to the Centers for Disease Control and Prevention website, most people infected with the virus have no apparent illness. Severe cases begin with the sudden onset of headache, high fever, chills, and vomiting. The illness may then progress into disorientation, seizures, or coma. "There is no specific treatment for (eastern equine encephalitis); care is based on symptoms," states the website. "You can reduce your risk of being infected with EEEV by using insect repellent, wearing protective clothing, and staying indoors while mosquitoes are most active." Hinz said that time is dusk and dawn. "The best thing for people -- even though it's hard this time of year with a hot, wet summer -- is to wear long sleeves and pants and use mosquito repellent with DEET," he said. Other good repellents contain picaridin, IR3535, or oil of lemon or eucalyptus. Hinz said people should also eliminate mosquito breeding sites by emptying standing water and changing water in bird baths and pet dishes weekly. The risk of infection will continue until late fall when nighttime temperatures fall below freezing. Hinz said the health department was in contact with veterinarians and local health providers. "The vets are contacting their clients for immunizations and handing out information about EEE, how to control mosquitoes," Hinz said. "We've told local doctors to be on the lookout for the disease, as well." These are the 1st human cases reported in Michigan since 2002. More than 50 additional cases in horses have been reported. The southwestern region of the state previously experienced an outbreak of the disease in the early 1980s and the mid-1990s. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ANTHRAX, HUMAN, BOVINE (BANGLADESH): 10 September 2010, While anthrax has already spread in many districts of Bangladesh, forcing the authorities issue a red alert, the government is hoping the disease will not turn into an epidemic [But read on. - Mod.MHJ]. The Institute of Epidemiology, Disease Control and Research (IEDCR) confirmed on Thursday [9 Sep 2010] that 447 people in 8 districts had been infected with anthrax in the last 3 weeks. IEDCR virologist A S M Alamgir said treatment facilities had been made available in all affected areas and claimed more than half the infected people had already been cured. Health Ministry officials initially said the northern Sirajganj district had the most number of infected, numbering 207. But they feared the situation was worse in another northern district, Lalmonirhat, where doctors suspect 320 people to be infected. [207 + 320 = 527 - Mod.MHJ] Officials also confirmed the disease spread after villagers consumed anthrax infected meat sold at low prices. Veterinary officials also confirmed that half a dozen anthrax-infected cows died in Lalmonirhat. They said despite vaccinating cows, they were receiving more infection in people. Officials reported acute vaccine shortage in most of the areas. However, after visiting several anthrax patients at the Dhaka Medical College Hospital, health minister A F M Ruhul Haque said there was "no reason to worry about anthrax. It will not be an epidemic, and its treatment is fairly easy. All required medicines are available everywhere." (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

FOODBORNE ILLNESS, RICE (PAKISTAN): 10 September 2010, More than 250 of the 1400 flood victims at a relief camp set up in Bengali Boys Sindhi Section School in Ibrahim Hyderi fell unconscious immediately after consuming cooked food, sources said. The victims started vomiting and the condition of around 59 of them started worsening until they had to be taken to a nearby hospital. The medical teams available at the camp rushed to the scene and efforts were initiated to provide immediate medical assistance to them. A local philanthropist had been providing cooked food to the flood victims after Mukhtiar Asadullah Abbasi had encouraged him to do so. A well-placed officer in the City District Government Karachi (CDGK) Revenue Department told Daily Times that by the time the food carriage arrived at the relief camp, the cooked rice had turned stale. However, since the rice did not show any sign of rotting, it was served to the flood victims. Subsequently, they started vomiting and majority of them fell unconscious. The authorities concerned immediately rushed to the scene and, according to them, the situation was under control and none of the victims was in serious condition. A well-placed officer in the CDGK Health Department told Daily Times that the sanitary situation in and around the relief camps was very poor. A similar incident had taken place 3 days ago at the Pak Swedish

Technical Institute in Quaidabad, Landhi Town where more than 80 flood affectees had fallen victim to food poisoning and fallen unconscious after consuming stale food. More than 10 victims whose condition had worsened were taken to the Sindh Government Hospital, Korangi No 5. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS AND OTHER (INDIA): 09 September 2010, A health official said today [8 Sep 2010] that 5 more people had died due to encephalitis [in Gorakhpur], taking the death toll in Uttar Pradesh's eastern region to 254 this year [2010]. "All the deaths occurred in BRD Medical College Hospital," additional director (Health) UK Srivastava said. Of the 5 dead, 2 belonged to Kushinagar and one each from Deoria, Santkabir Nagar, and Basti, he added. Of the total 254 deaths, 238 occurred in BRD hospital, while the remaining took place in other government hospitals of the region -- Gorakhpur, Siddharthnagar, Kushinagar, Maharajganj, Basti, and Deoria districts, he said. Meanwhile, 30 new patients have been admitted in BRD Medical College Hospital, while 6 were admitted at other government hospitals of the region, he said. As many as 325 patients are presently undergoing treatment at the BRD hospital and various other government hospitals of the region, he said. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, LIVESTOCK (BHUTAN): 07 September 2010, Following the incessant rain in mid July 2010 animals either died suddenly or showed signs and symptoms consistent with anthrax. The cause was latter confirmed as anthrax as per laboratory observation and clinical symptoms. The 1st case was suspected to have taken place sometime between mid July and 13 Aug 2010 when the Mangmi of Ngangla geog [block] had reported the cattle death to the livestock-in-charge of Panbang and accordingly the in-charge of RNR [Renewable Natural Resources] Extension Centre (RNREC) in Panbang sent a flash report to RLDC [Regional Livestock Development Centre] Zhemgang on 2 Aug 2010. Immediately the team from RLDC, Zhemgang accompanied by staff of LEC [Livestock Extension Centre], Kagtong visited the affected villages under Ngala geog to conduct detail investigation. The investigation team came across a carcass of a Jatsham on 13 Aug 2010. The carcass was not opened since there was bleeding from the natural orifices which indicates anthrax. The smears and swabs were collected to carry out further investigation at the laboratory. The impression smears (slide) collected on 13 Aug 2010 were subjected to Gram and MB staining and found Gram positive rods which has the shape of *Bacillus anthracis*. The team conducted an awareness meeting and advice was given to the farmer about the risk of anthrax and proper burial of carcasses. A total of 8 people have suffered from the illness after handling and consuming the meat from the animals that have died due to suspected anthrax. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

Sadia Aslam, MPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-2074
Fax: 410-333-5000
Email: SAslam@dhmh.state.md.us

Zachary Faigen, MSPH
Epidemiologist
Office of Preparedness and Response
Maryland Department of Health & Mental Hygiene
300 W. Preston Street, Suite 202
Baltimore, MD 21201
Office: 410-767-6745
Fax: 410-333-5000
Email: Zfaigen@dhmh.state.md.us